

## How can schools build learning organisations in difficult education contexts?

**Kholeka Constance Moloi**

[kholekam@vut.ac.za](mailto:kholekam@vut.ac.za)

*There is paucity in the study of learning organisations within the education sector and particularly in schools working in difficult socio-economic contexts, such as those studied in this investigation. In this qualitative study I therefore sought evidence from teachers, in one of the districts of Gauteng province, through in-depth, semi-structured focus group interviews to establish what a learning organisation is. Using data obtained through two in-depth, semi-structured focus group interviews with 16 teachers, themes were constructed to theorise their experiences on what a learning organisation is. The results showed that teacher commitment to personal learning enhanced student achievement. This study contributes to the understanding of theories on learning organisations from the experiences of these teachers working in disadvantaged townships schools.*

**Keywords:** change; collaboration; collective intelligence; continuous learning; effective teaching; knowledge management; learning organisation; shared values; systems thinking; teacher commitment

### Introduction

There is evidence that when schools are perceived as learning organisations students will succeed (Chan, 2009; Welsdy, 2009). This study was conducted with selected teachers working in schools in one of the districts of Gauteng province through in-depth, semi-structured focus group interviews to understand the meaning of a learning organisation from their perspectives. These teachers were selected because their schools are among the better performing within the identified district in the Grade 12 examinations (District X, Analysis of Grade 12 results). While schools should be regarded as learning organisations, most research on learning organisations is from an economic perspective and it involves studies on market valuation (Brennan, 2001), financial aspects of organisational performance and profit making (Chan, 2009) by business companies (Senge, 2006). The findings of these studies do not apply to education generally and in particular, to schools working under difficult, ill-resourced contexts such as those studied in this paper. It is for this reason that the researcher deems this study to be important because it fills a gap in how the concept of a learning organisation can be applied to schools to enhance student achievement.

In defining a learning organisation Dixon (1999) focused on the intentional use of learning processes at the individual, group and system level to transform the organisation to increasingly succeed by turning knowledge into real value. According to Garvin, Edmondson and Gino (2008:110), a learning organisation is 'a place where employees excel at creating, acquiring and

transferring knowledge'. For Kim (1998) and Schein (1997) a learning organisation increases an organisation's capability to take effective action. Senge, Kleiner, Roberts, Ross and Smith (1996:3) view a learning organisation as a place where people continually expand their capacity to create the results they truly desire and where people are continually learning how to learn together. This according to Kelly, Luke and Green (2008) is knowledge management which calls for a school to develop a deep capacity among its entire staff to be at the forefront of knowledge and skill in learning and teaching, and the support of learning and teaching.

While this paper draws from a number of recent studies on learning organisations, my notion of the learning organisation is heavily influenced by the work of Senge *et al.* (1996) articulated in their ground-breaking book, *The Fifth Discipline*. Senge (2006:4) believes that learning organisations are possible because not only is it people's nature to learn but people love to learn. Senge (2000:22-23) suggests that people are able to learn because leaders in learning organisations are designers, teachers and stewards who lead every member of the organisation in managing the tenuous relationship between vision and current reality. According to Kelly *et al.* (2008) and Cochrane-Smith & Lytle (2001:45) significant research about teacher learning in recent years has shifted from what teachers *do* to what they *know* and what informs this knowing. The learning organisation is thus a valuable tool for facilitating knowledge management to improve teaching and learning in schools (Weldy 2009:58). To gain a deeper understanding of what a learning organisation is, the researcher interrogates the concept (learning organisation) by posing the following questions: What is a learning organisation and how can teachers working in difficult education contexts build learning organisations within their schools?

### **The context of the studied schools**

The external environment in which schools have to operate has become increasingly more complex, uncertain, marking an ever-increasing pace, density and depth of change. Among these global changes are some context specific challenges marked by increasing levels of poverty among school communities, high levels of illiteracy and unemployment, high parent mortality rates that increase the number of child-headed families and thus exacerbate child poverty. In the midst of all these challenges are some of the most disadvantaged, ill-resourced schools — those that work without libraries, computer or internet facilities, and in some instances without electricity, working alongside some of the well-resourced schools from the previously advantaged communities. For the researcher to understand how schools can or cannot become learning organisations, the institutional and social contexts within which these schools operate should be considered, if we are to make sense of the magnitude of turning schools into learning organisations.

The researched schools in this study are situated in black settlement areas, attended by black learners who are taught by black teachers. For

example, the average percentage passes of the Grade 12 results of the last eight years (2001–2008) in the researched schools show that of the 47 secondary schools in the district 38 of them are underperforming, with the Grade 12 results from 2001 to 2008 ranging between 29.73% – 39.16%. The top seven best performing schools in the district are all from the previously whites-only schools with average pass percentages ranging between 86.56% – 99.63%, in the years 2001 to 2008. The few good performing predominantly black schools' averages for the past eight years (2001–2008) range between 60.99% – 81.33% (District X, Analysis of the Grade 12 results 2001–2008).

Within this difficult schooling context are unexpected policy changes that teachers have to contend with. For example, the Minister, Angie Motshekga, acknowledges that there are problems in schools: "Curriculum reform is not something that the system takes lightly. We need to work against change fatigue in order to restore confidence and enthusiasm amongst all stakeholders" (Curriculum News, 2010:2). Could this be the explanation for the cause of the continuing discrepancy in the pass percentage rates between the previously advantaged, whites-only schools and the disadvantaged schools? And could this also be what Fullan (1997:42) claims: "the school is not now a learning organisation?"

### **Theoretical underpinning and problematising the learning organisation**

The theoretical perspective that informs this study is the learning organisation. Its fundamental ontological assumptions is that learning is located in the socially constructed meanings by actors who are able to understand and harness the combined efforts of moral purpose and skilled change agency (Fullan, 1997:42) in the contexts of their schools to be able to build learning organisations (Fineman, 2003:561). Following the work of Guba and Lincoln (2006:193–196) I opted for the learning organisation perspective because it enabled me to study how meanings of successful school transformation through individual and collective learning by teachers are understood and are constructed by teachers in the researched schools. From an epistemological position, the learning organisation perspective is subjectivist because it enables the researcher to provide a rich description of teachers' personal lived experiences, their inter-subjective interpretations of meanings and their interaction with each other as well as with their students in their natural school settings (Bryman, 2004:267).

Senge (2006:18) has suggested that organisations fail to learn due to what he calls a 'learning disability' because people focus on the tasks they are performing and not the purpose of the greater enterprise in which they take part. Furthermore, people find it easy to blame the enemy out there when things go wrong. Fullan (1997:442) asserts that the reason why schools fail to become learning organisations is because: "one-third of pre-school children are destined for school failure because of poverty, neglect, sickness, handicapping conditions and lack of adult protection and nurturance". I therefore seek to make the point that the process of building learning organisations should be

addressed within the context of identified problems (contextually embedded), informed by the specific experiences of individuals and teams working within the particular school settings.

Recent theoretical work on learning organisations has emphasized the importance of understanding that different definitions, models and theories that underpin organisational learning exist and that none is widely accepted (Coetsee, 2003:6; Mitki, Shani & Meiri, 1997; Fenwick, 1996). The conceptualisations and perspectives of these definitions, models and theories vary both in discipline and focus, but they do have some commonalities (Coetsee, 2003: 6). They also differ in terms of their epistemological, ideological and ontological predilections. Some theorists emphasise knowledge acquisition or the development of a knowledge base (Nonaka, 1991) while others see the learning organisation as adaptation to the environment (Hodgson, 1995), skill learning and institutional know-how to increase the 'knowledge intensity' of organisations as a prerequisite for coping with difficult, complex global competition, technological advancements and unstable socio-economic trends (Weldy, 2009:58; Swanepoel & Slabbert, 2003; Espejo *et al.*, 1997:298; Rondenelli, Middleton & Verspoor, 1990:1-3; Espejo, Schuhmann, Schwaninger & Bilello, 1997:24).

According to Coetsee (2003), there are three distinct perspectives from which studies on learning organisations can be approached, namely, the normative, the developmental, and the capability perspective. From the normative perspective, organisational learning only takes place under certain conditions (Coetsee, 2003:6), and work from Senge (1990) and Watkins & Marsick (1993) serve as examples in this regard. The developmental perspective suggests that the learning organisation represents a late stage of organisational development (OD) (Argyris & Schon, 1978). The capability perspective proposes that all organisations have the inherent ability to learn (MacGilchrist, Myers & Reed, 1997:19) and that there are different ways an organisation can learn (Senge, 1990). The latter perspective is the widely accepted view of a learning organisation. Whilst this paper draws heavily from this perspective (capability) I readily acknowledge its structural functionalist and instrumentalist perspective because of its inability to problematize conflict, power, history, ideology, disorder and change in society and in the education system at the schools investigated in this study.

### **Methodological issues**

To address the research question empirical data were collected through in-depth, semi-structured focus group interviews and a literature study was undertaken to locate and to problematise the phenomenon of the learning organisation. I opted for qualitative research methods because I was interested in the following modes of inquiry (Bryman, 2004:266): "an inductive view of the relationship between theory and empirical research whereby the latter is generated out of the former"; and the adoption of an interpretivist epistemological position which enabled me to understand the social world of

teachers in their efforts to construct learning organisations and how they interpreted their own world in that process (Creswell, 2008:53).

Sixteen teachers from primary schools (eight participants) and secondary schools (eight participants) participated in this study and they were purposely selected from a population of 96 primary schools and 47 secondary schools in the identified district. These teachers work primarily in black township schools in the identified district of Gauteng province. They were chosen based upon two factors. Firstly, their schools are among the better performing in the district, particularly the secondary schools, in relation to the pass percentages in the Grade 12 external examinations. Secondly, most of the participants possess senior education degree qualifications. Based on these two factors I assumed that these participants would understand aspects of a learning organisation and would thus be able to provide the information I sought on what behaviours and activities were required to build such an organisation in order for her to theorise from their experiences (Babbie, Mouton, Vorster & Prozesky, 2004; Riege, 2003:75; Hatch, 2006:43).

The size of the sample was therefore sufficient for the purposes of this study and what I wanted to find out about the central concept, learning organisations, and the data set obtained from the interviews was also large enough to answer the research question: What is a learning organisation and how can schools working in difficult education contexts build learning organisations? Probing questions arose from the main research question, and the interviewees also guided the research agenda by the extent of their enthusiasm in providing information (Holliday, 2002:58).

I conducted one interview meeting with the selected participants (eight primary school teachers and eight secondary school teachers) separately. The second meeting with all the participants was held to read their responses to them in order to clarify any misunderstanding of the transcribed data. The researcher's role was thus exploration and inspection (Merriam, 1998) of the actual empirical character of the school as a learning organisation from the voices and representation — the forms of narrative and dialogue — around which teachers make sense of their lives and their work in schools (Giroux, 2006). This was important in relation to the problem that was being addressed, the data I selected to unearth relations between categories of such data, and the validation of theoretical views on the learning organisation that would guide my interpretation of the collected data. The research methods chosen were thus suitable for the purpose of this study.

In terms of data analysis, I used an iterative model borrowed from Creswell (2008:244-270) in which she started with transcription of the interviews, coding, development of themes, representation of data, validation and interpretation of data, data analysis using atomistic approaches (Willis, Jost & Nilakanta, 2007:293) and triangulation and finally reporting of the data. The result is a report that gives a rich product based on the experiences of the sixteen participants.

I sought to establish a trusting relationship with the participating teachers by employing the following ethical considerations: care was taken to

acknowledge participants' privacy and to address them with sensitivity and their right to confidentiality and voluntary participation through the use of informed consent and careful adherence to the research protocol. None of the participants was thus coerced to participate in the interviews. To ensure anonymity pseudonyms were used. These measures contributed to the internal validity of the present study (Babbie & Mouton, 2001; Creswell, 2003; Miles & Huberman, 1994). Bias was avoided by using the same research question and probing questions consistently in the two semi-structured focus group interviews with the purposefully selected sample. A systematic approach to sampling, data collection, data analysis and particularly interpretation of the results was also followed to avoid bias. Although a large number of data was generated from the interviews, only relevant information was used in the data analysis. This process also helped to improve data analysis efficiency bias reduction. The research design and methods of inquiry employed aim at making this study replicable and reliable. The qualitative nature of this study limits the generalisation of the results to all schools, but I intend that the instruments used be valid and that the findings be generalisable to school settings working under similar difficult education contexts (Merriam, 1998: 198).

The interviews were transcribed, coded and grouped. All passages that were coded the same way were judged to be about the same theme. In the first level of coding I identified themes, units of meaning, which included words and sentences, as they were expressed by the participants. The classification scheme used in coding data was derived from my previous knowledge of the subject area, namely, the learning organisation theory and I was also looking for other ideas that arose out of the data. I tried to be as close as possible to the text, used the words of the individual participants, and at this stage of coding, I did not use theoretical concepts of the learning organisation. Coding data involved labelling passages of text according to content, and retrieving provided a means to collect similarly labelled passages. With repeated readings of the data, the sets of data were assigned codes and grouped according to concepts that related closely to them.

In the second level of coding I reformulated the coded data into more theoretical words. The transcripts of the coded passages were repeatedly scrutinized for further identification of patterns that required further comparison and analysis, which led to broader concepts that constituted a learning organisation being identified. The coded phrases were then placed under each of the identified concepts of a learning organisation (Holliday, 2002:58). In the third level of coding I analysed the data in order to construct a model of understanding by looking for coherence. The codes were given meaningful names that underpin a specific theme of a learning organisation. Thus, coding data became part of theory building which corroborated existing theory on the learning organisation in order to answer the research question. The classification scheme used in this article employed terms commonly used in the learning organisation theory — an emic perspective (Merriam, 1998:157).

Eight themes were identified and these are presented, together with sub-themes, in Table 1.

**Table 1** Themes and sub-themes of a learning organisation

Themes	Sub-themes
Personal mastery	Teacher commitment Giving oneself wholeheartedly
Mental models	Think together Sharing thoughts
Shared vision	Team spirit Ownership
Team learning	Support Experiencing the other Strong force of collaboration Shared sense of working together
Systems thinking	A community
Reflection	Introspection, self-correction, self-analysis
Dialogue	Accept valid criticism Talk about issues
Leadership	Authentic collegial relationship

## Results and discussion

The presentation of the results here is directly linked to the research question: What is a learning organisation and how can schools working in difficult education contexts build learning organisations? The motivation to study this particular concept, a learning organisation, arises from a number of factors, including the need to understand the reason why so many schools in the identified district do not perform well, despite large sums of money being invested on education. The main finding of this study is that to build a learning organisation in difficult education contexts requires teachers who are committed to personal learning in order to teach effectively for student achievement. The eight themes identified are presented and discussed below.

### Personal mastery

The participants in this study indicated that personal mastery was an important quality for them to be able to build a learning organisation. One of the teachers commented thus, “*It is a sense of I have a stake in this task and it is giving oneself wholeheartedly, self-discipline, zeal and sacrifice*”. The partici-

pants also indicated that personal mastery included behavioural qualities such as patience, sincerity and sacrifice. Earlier studies, Senge *et al.* (1996:4) and MacGilchrist *et al.* (1997:107) indicate that learning organisations are built by people who are committed to a common undertaking. Other discourses used by participants included: "*Commitment comes from within*". One of the teachers indicated that personal mastery and commitment are about: "*perseverance, responsibility and self-drive*". Takeuchi and Nonaka (2002:176) point out that the key to creating new knowledge and a learning organisation is personal mastery and commitment to the enterprise's mission.

#### Mental models

The participants indicated that people are emotionally different because they come from different backgrounds and therefore respect for each other, respect for individuals and what they bring into the environment was essential in an effort to build a learning organisation. Senge *et al.* (1996:235) assert that mental models determine what we see. One teacher commented: "*Respect and proactive ways of going about business enhance collaboration*". Another teacher commented: "*We need to separate attitudes from issues*". These units of meaning from the participants are captured in the following: "*mental models are images, assumptions, and stories which we carry in our minds of ourselves, other people, institutions, and every aspect of the world*" (Senge *et al.*, 1996:235; Takeuchi & Nonaka, 2002:176).

#### Shared vision

The findings from this study revealed that the daily interaction among teachers provides the support from each other that they need to achieve the goals of teaching and learning. One of the teachers commented: "*we must be like what men do in clubs such as the 'Beach Boys', they have direction, they are goal directed and they are aligned*". Senge *et al.* (1996:298) assert that the discipline of building a shared vision is centred around people articulating their common stories — around vision, purpose, values, why their work matters, and how it fits in the larger world. One of the teachers commented: "*you contribute to the best to make the vision to be realised*". Senge *et al.* (1996:298) postulate that a shared vision creates a sense of purpose that binds people together and propels them to fulfill their deepest aspirations.

#### Team learning

All the participants commented that working in teams builds a feeling of belonging in which the figurehead does not necessarily decide on everything. They indicated that individuals within the school needed support because it would be easier for them to collaborate. They also indicated that there was power in a collective force. One of the participants said: "*To me collaboration is about partnerships where everybody is committed to education*". Senge *et al.* (1996:352) indicate that team learning is a discipline of alignment, the ability to function as a whole. Another participant commented: "*Team work is about*

*recognition and participation*". MacGilchrist *et al.* (1997:108) indicate that team learning is about collegial intelligence that describes the capacity for staff in particular to work together to improve their practice in the classroom.

### Systems thinking

The study found that the teachers believed that meaningful connections and meaningful interactions are the foundation of systems thinking. One participant commented: "*We need to revisit our vision and mission in order to assess whether they we are still moving in the right direction or not*". Another participant commented: "*Collegial relationships are about interdependence*". Senge (2006:125) proposes that in order to manage the complexity of collegial relationships, what is most needed by teachers is for them to know what is important and what is not important, what variables to focus on and which to pay less attention to in their teaching and learning activities. One participant commented: "*this is about sharing thought which means, this is our thought as an institution which is a culmination of team work*". As Senge *et al.* (1996:190) purport a systems effort will almost always suggest that you re-examine the assumptions that underlie your practices.

### Reflection

The participants commented that it is important for them to think about their work because it helps them to see where they are going. They indicated that thinking about their work enables them to diagnose their errors. One of the participants commented: "*Collaboration undergoes recycling*". Another participant commented that thinking about their work involves thinking about refining ideas and reflecting for clarification. Most of the participants agreed that they have to reflect and endure in their tasks and also engage in self-analysis that enables them that to apply corrective action where pertinent. One participant commented: "*We are able to evaluate our actions*".

### Dialogue

Dialogue was also an important finding of this study. The participants indicated that the principal should listen to criticisms that come from different quarters and he/she should see these as positive growth experiences. They also indicated that where clashes existed it was necessary that the staff members find ways of ironing out their differences. One of the participants commented: "*The principal should clarify roles and responsibilities and differences in order to derive mutual understanding among staff members*". Indeed, Senge *et al.* (1996:374) point out that the facilitation of dialogue is a discipline in itself, which requires respect and humility to be understood. Another participant commented: "*We need to talk about problems we experience and we should not defend ourselves when we are wrong*". Chattell (1995: 202-215) notes that dialogue encourages regenerative thinking and generative listening and also being open to multiple possibilities that encourage creativity.

### Leadership

The participants commented that the efforts of building a learning organisation are supported by principals who are instructional leaders, and principals who avoid autocratic behaviour, but are participative and visionary leaders. One of the teachers commented: "*People behind leadership in the school are the best barometer of leadership but it is important that the leaders should define what they want to achieve*". Another teacher commented: "*The principal must not have cliques because if he/ she does so it will break the morale of staff members*". This argument is in line with Senge's (2006), assertion that any school that wants to become a learning organisation will depend upon the school principal's ability to create the context and necessary conditions for that kind of learning to take place and thrive.

The results in this study are important for the research community because they help to explain how teachers working in difficult education contexts can collectively address the many challenges schools face through continuous learning and reflection to enhance student achievement. This is what MacGilchrist *et al.* (1997:107) refer to as pedagogical intelligence which ensures that learning and teaching are regularly being examined and developed and they are never an orthodoxy that remains unexamined. Furthermore, the findings of this study help us to understand the dynamic relationship between thinking, learning and teaching and that the process of metacognition is an essential aspect of building a learning organisation (MacGilchrit, *et al.* 1997: 107).

### Conclusion

The account presented in this article suggests an approach that can be adopted by teachers working in difficult education contexts in their efforts to build a learning organisation. The initial literature review identified the concepts and theories that underpin what a learning organisation is and these informed the interview questions and implication for effective teaching and learning in an effort to build a learning organisation. The eight themes found in this study, which constitute a learning organisation, can be transferred to other disciplines and settings such as the human resource management and organisational development.

The limitations of this study are, among other things, the choice of a small sample and particularly of one district in Gauteng province. The results as indicated earlier can thus not be generalised to all other schools, including the previously whites-only schools, nor, to any other districts in Gauteng province or beyond. Other data that could have assisted in answering the research question fully, would have been the perspectives of school principals, learners, parents and of teachers who work in the previously whites-only schools if they had been included in the study. An ethnographic study could also have helped to yield richer data because the researcher would have studied the selected schools in a much denser way, staying close to the phenomenon under study for a much longer period of observation, and thus

collecting more detailed file notes.

While the results of this study confirm what is already known about learning organisations within a specific context, I recommend that further research on the phenomenon be conducted and on a much larger scale, employing both quantitative and qualitative research methods, to enhance our knowledge of improving teaching and learning. Developing learning organisations in schools has serious implications for school management and leadership, particularly in the context of re-centering the student through emerging perspectives in learning and teaching.

## References

Argyris C & Schön D 1978. *Organisational learning: A Theory of action perspective*. Reading, Massachusetts. Addison Wesley.

Babbie E & Mouton J 2001. *The practice of social research*. Oxford: Oxford University Press.

Babbie E, Mouton J, Vorster P & Prozesky B 2004. *The practice of social research*. Oxford: University Press.

Brennan N 2001. Reporting intellectual capital in annual reports: evidence from Ireland. *Accounting, Auditing and Accountability Journal*, 14:423-437.

Bryman A 2004. *Social Research Methods*. Oxford: Oxford University Press.

Chan KH 2009. Impact of intellectual capital on organisational performance. An empirical study of companies in the Hand Seng index. (Part 1). *The Learning Organization. The International Journal of Knowledge and Organizational Learning Management*, 16:4-21.

Chattell A 1995. *Managing for the future*. London: McMillan Business.

Coetsee WJ 2003. Learning as mechanism for global competitiveness: a human resource development (HRD) perspective. In: *Managing employment relations in South Africa*. Durban: Butterworths, Lexis Nexis.

Cochran-Smith M & Lytle S 2001. Beyond Certainty: Taking an inquiry Stance on Practice. In: Lieberman A & Miller L. *Teachers Caught in the Action: Professional Development that Matters*. New York: Teachers College Press.

Creswell J 2003. *Research design. Qualitative, Quantitative and Mixed Approaches*. 2nd edn. California: Sage publications.

Creswell JW 2008. *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. Upper saddle River, New Jersey: Pearson Prentice Hall.

District X 2010. *The analysis of the Grade 12 results, 2001-2008*. Gauteng province.

Dixon NM 1999. *The organizational learning cycle: How we can learn collectively*. 2nd edn. Hampshire: Gower Publishing.

Espejo R, Schuhmann W, Schwaninger M & Bilello U 1997. *Organizational transformation and learning: a cybernetic approach to management*. New York: John Wiley & Sons.

Fenwick T 1996. *Limits of the learning organisation: a critical look*. Antagonish, Nova Scotia: Educational Resources Information Centre.

Fineman S 2003. "Emotionalizing Organizational Learning. Discourse of Knowledge Management and the Learning Organisation: Their Production and Consumption". In: Easterby-Smith M & Lyles MA (eds). *The Blackwell handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell Publishing.

Fullan M 1997. *Change forces. Probing the depths of educational change*. London: Falmer Press.

Garvin DA, Edmondson AC & Gino F 2008. "Is Yours a Learning Organization?" *Harvard Business Review*, 109-116.

Giroux HA 2006. *The Giroux Reader*. Boulder, Colorado: Paradigm Publishers.

Guba EG & Lincoln YS 2005. "Paradigmatic Controversies, Contradictions, and Emerging Confluences", In: Denzin N & Lincoln Y (eds). *The Sage Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications.

Hatch JM & Cunliffe AL 2006. *Organization Theory. Modern, symbolic, and postmodern perspectives*. 2nd edn. Oxford: Oxford University Press.

Hodgson P 1995. *The learning organisation: The Financial Times handbook of management*. London: Pitman.

Holliday A 2002. *Doing and writing Qualitative Research*. London: Sage Publications.

Kelly GJ, Luke A & Green J 2008. Introduction. What counts as knowledge in educational settings: Disciplinary knowledge, assessment, and curriculum. *Review of Research in Education*, AERA, 32:vii-x.

Kim DH 1998. *The link between the individual and organisational learning in the strategic management of intellectual capacity*. Woburn, MA: Butterworth-Heinemann.

MacGilchrist B, Myers K & Reed J 1997. *The Intelligent School*. London: Paul Chapman Publishing.

Merriam SB 1998. *Qualitative research and case study applications in education. Revised and expanded from case study research in education*. San Francisco: Jossey-Bass.

Mertens DM 1998. *Research methods in education and psychology: integrated diversity with quantitative and qualitative approaches*. Thousand Oaks, CA: Sage.

Miles MB & Huberman AM 1994. *Qualitative data analysis: A sourcebook of new methods*. 2nd edn. Newbury Park, CA: Sage.

Mitki Y, Shani AB & Meiri Z 1997. Organisational learning mechanisms and continuous improvement. *Journal of Organisational Change Management*, 10:426-446.

Motshekga A 2010. *Curriculum News. Improving the quality of learning and teaching. Basic education*.

Nonaka I 1991. The knowledge-creating company. *Harvard Business Review*, 69:96-104.

Riege AM 2003. Validity and reliability in case study research: a literature review with "hands-on" applications for each research phase. *Qualitative Market research: An International Journal*, 6:75-86.

Rondenelli DA, Middleton J & Verspoor AM 1990. *Planning education reforms in developing countries: the contingency approach*.

Scarborough H & Swan J 2003. Discourse of Knowledge Management and the Learning Organisation: Their Production and Consumption. In: Easterby-Smith M & Lyles MA (eds). *The Blackwell handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell Publishing.

Schein EH 1997. Organizational and managerial culture as a facilitator or inhibitor of organisational learning. *Society for organisational learning*. Cambridge, MA: MIT.

Senge PM 1990. *The Fifth Discipline: The art and practice of the learning organization*. New York: Doubleday Currency.

Senge PM, Kleiner A, Roberts C, Ross RB & Smith BJ 1996. *The Fifth Discipline*

*Fieldbook. Strategies and tools for building a learning Organization.* London: Nicholas Brealey Publishing.

Senge PM 2000. Reflections on “A Leader’s New Work: Building Learning Organizations”. In: Morey D, Maybury M & Thuraisingham B (eds). *Knowledge Management, Classic and Contemporary Works*. London: The MIT Press.

Senge PM 2006. *The Fifth Discipline. The Art and Science of the Learning Organisation*. London: Random House.

Swanepoel BJ & Slabbert JA 2003. Strategic thinking and choice in employment relations: towards “world-class”. In: *Managing employment relations in South Africa*. Durban: Butterworths, LexisNexis.

Takeuchi H & Nonaka I 2002. “Theory of Organizational Knowledge Creation”. In: Morey D, Maybury M & Thuraisingham B (eds). *Knowledge Management: Classic and Contemporary Works*. Cambridge, MA: The MIT Press.

Watkins K & Marsick V (eds) 1993. *Sculpting the learning organization. Lessons in the art and science of systematic change*. San Francisco: Jossey-Bass.

Weldy TG 2009. Learning organization and transfer: Strategies for improving performance. *The Learning Organization. The International Journal of Knowledge and Organizational Learning Management*, 16:58–68.

Willis JW, Jost M & Nilakanta R 2007. *Foundations of Qualitative Research: Interpretive Approaches*. Thousand Oaks, CA: Sage Publications.

### **Author**

Kholeka Moloi is Professor in Education at the Vaal University of Technology. She is widely published and her research focuses on learning organisations, change management, and educational leadership.